=> s 150 and py<2003 5 L50 AND PY<2003

=> d 1-5 ibib kwic

L51 ANSWER 1 OF 5 USPATFULL on STN

ACCESSION NUMBER:

2002:199103 USPATFULL

TITLE:

Methods of reducing papillomavirus infection using

immunomodulatory polynucleotide sequences

INVENTOR(S):

Nest, Gary Van, Martinez, CA, UNITED STATES

Eiden, Joseph J., JR., Danville, CA, UNITED STATES

NUMBER KIND DATE -----US 2002107212 A1 US 2001-802445 A1 20020808 PATENT INFORMATION:

APPLICATION INFO.:

20010309 (9)

NUMBER DATE

PRIORITY INFORMATION:

US 2000-188265P 20000310 (60)

DOCUMENT TYPE: Utility

APPLICATION FILE SEGMENT:

Karen R. Zachow, Morrison & Foerster LLP, 755 Page Mill LEGAL REPRESENTATIVE:

Road, Palo Alto, CA, 94304-1018

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 3 Drawing Page(s)

LINE COUNT: 1604

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

US 2002107212 A1 20020808 PΙ

[0122] ISS polynucleotide formulations may contain additional components

such as salts, buffers, bulking agents, osmolytes, antioxidants, detergents, surfactants and other pharmaceuticallyacceptable excipients as are known in the art. Generally, liquid ISS polynucleotide formulations made in. . .

[0130] Nasopharyngeal and pulmonary routes of administration include, DETD but are not limited to, intranasal, inhalation, transbronchial and transalveolar routes. The ISS-containing polynucleotide may thus be administered by inhalation of aerosols, atomized liquids or powders. Devices suitable for administration by inhalation of ISS-containing compositions include, but are not limited to, nebulizers, atomizers, vaporizers, and metered-dose inhalers. Nebulizers, atomizers, vaporizers and metered-dose inhalers filled with or employing reservoirs containing formulations comprising the ISS-containing polynucleotide(s) are among a variety of devices suitable for use in inhalation

delivery of the ISS-containing polynucleotide(s). Other methods of delivering to respiratory mucosa include delivery of liquid formulations, such as by. . .

DETD

. . administration may be by bolus or infusion administration. For SC administration, administration may be by bolus, infusion or by implantable device, such as an implantable minipump (e.g., osmotic or mechanical minipump) or slow release implant. The ISS polynucleotide(s) may also be delivered in a slow release formulation adapted for IV, IP, IM, ID or SC administration. Administration by inhalation is preferably accomplished in discrete doses (e.g., via a metered dose inhaler), although delivery similar to an infusion may be accomplished through use of a nebulizer. Administration via the transdermal and transmucosal.

in an ointment for topical formulation in appropriate packaging. Also contemplated are packages for use in combination with a specific device, such as an inhaler, nasal administration device (e.g., an atomizer), transdermal administration device, or an infusion device such as a minipump.

L51 ANSWER 2 OF 5 USPATFULL on STN

ACCESSION NUMBER:

2002:186102 USPATFULL

TITLE:

Compounds and methods for the treatment of airway

diseases and for the delivery of airway drugs

INVENTOR(S):

Boucher, Richard C., JR., Chapel Hill, NC, UNITED

STATES

KIND NUMBER DATE -----

PATENT INFORMATION:

US 2002099023 A1 20020725

APPLICATION INFO.:

US 2002-87355 A1 20020301 (10)

RELATED APPLN. INFO.:

Division of Ser. No. US 1999-465429, filed on 21 Dec

1999, PENDING

DATE NUMBER ______

PRIORITY INFORMATION:

US 1999-137991P 19990607 (60)

US 1998-113785P

19981222 (60)

DOCUMENT TYPE:

Utility APPLICATION

FILE SEGMENT: LEGAL REPRESENTATIVE:

MYERS BIGEL SIBLEY & SAJOVEC, PO BOX 37428, RALEIGH,

NC, 27627

NUMBER OF CLAIMS:

30

EXEMPLARY CLAIM:

1

LINE COUNT:

627

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

US 2002099023 PΤ

A1 20020725

. . . obstructive airway diseases are treated by administering an AB osmotically active compound such as a salt, sugar, sugar alcohol, or organic osmolyte to the afflicted airway surface. The compound may be administered as a liquid or dry powder aerosol formulation. Diseases that. .

. . . a non-absorbable, osmotically active compound (hereinafter SUMM referred to as an "active compound") such as a salt, sugar, sugar alcohol, organic osmolyte, or other osmotically active compound to an airway surface of the subject in an amount effective to increase the volume.

[0018] Active compounds of the present invention are molecules or DETD compounds that are osmotically active (i.e., are "osmolytes"). "Osmotically active" compounds of the present invention are membrane-impermeable (i.e., essentially non-absorbable) on the airway or pulmonary epithelial surface. The. . . the bronchi and bronchioles, alveolar surfaces, and nasal and sinus surfaces. Active compounds of the present invention may be ionic osmolytes (i.e., salts), or may be non-ionic osmolytes (i.e., sugars, sugar alcohols, and organic osmolytes). It is specifically intended that both racemic forms of the active compounds that are racemic in nature are included in.

[0019] Active compounds useful in the present invention that are ionic DETD osmolytes include any salt consisting of a pharmaceutically acceptable anion and a pharmaceutically acceptable cation. Preferably, either (or both) of the.

[0023] Active compounds of the present invention also include non-ionic DETD

osmolytes such as sugars, sugar-alcohols, and organic
osmolytes. Sugars and sugar-alcohols useful in the practice of
the present invention include but are not limited to 3-carbon sugars
(e.g., . . . reduced forms of sugar/sugar alcohols (e.g., dulcitol,
arabitol) are accordingly active compounds of the present invention. As
with the ionic osmolytes of the present invention, as between
the dextrorotatory (D) form and the levorotatory (L) form of an active
compound of. . .

[0024] Active compounds of the present invention additionally include DETD the family of non-ionic osmolytes termed "organic osmolytes. " The term "organic osmolytes" is generally used to refer to molecules used to control intracellular osmolality in the kidney. See e.g., J. S. Handler. . . the inventor does not wish to be bound to any particular theory of the invention, it appears that these organic osmolytes are useful in controlling extracellular volume on the airway/pulmonary surface. Organic osmolytes useful as active compounds in the present invention include but are not limited to three major classes of compounds: polyols (polyhydric alcohols), methylamines, and amino acids. The polyol organic osmolytes considered useful in the practice of Tilis invention include, but are not limited to, inositol, myo-inositol, and sorbitol. The methylamine organic osmolytes useful in the practice of the invention include, but are not limited to, choline, betaine, carnitine (L-, D- and DL forms), phosphorylcholine, lysophosphorylcholine, glycerophosphorylcholine, creatine, and creatine phosphate. The amino acid organic osmolytes of the invention include, but are not limited to, the D- and L forms of glycine, alanine, glutamine, glutamate, aspartate, proline and taurine. Additional osmolytes useful in the practice of the invention include tihulose and sarcosine. Mammalian organic osmolytes are preferred, with human organic osmolytes being most preferred. However, certain organic osmolytes are of bacterial, yeast, and marine animal origin, and these compounds are also useful active compounds within the scope of. .

[0025] Under certain circumstances, an osmolyte precursor may DETD be administered to the subject; accordingly, these compounds are also useful in the practice of the invention. The term "osmolyte precursor" as used herein refers to a compound which is converted into an osmolyte by a metabolic step, either catabolic or anabolic. The osmolyte precursors of this invention include, but are not limited to, glucose, glucose polymers, glycerol, choline, phosphatidylcholine, lyso-phosphatidylcholine and inorganic phosphates, which are precursors of polyols and methylamines. Precursors of amino acid osmolytes within the scope of this invention include proteins, peptides, and polyamino acids, which are hydrolyzed to yield osmolyte amino acids, and metabolic precursors which can be converted into osmolyte amino acids by a metabolic step such as transamination. For example, a precursor of the amino acid glutamine is poly-L-glutamine, . . .

DETD [0026] Also intended within the scope of this invention are chemically modified osmolytes or osmolyte precursors. Such chemical modifications involve linking to the osmolyte (or precursor) an additional chemical group which alters or enhances the effect of the osmolyte or osmolyte precursor (e.g., inhibits degradation of the osmolyte molecule). Such chemical modifications have been utilized with drugs or prodrugs and are known in the art. (See, for example,. . .

DETD

. . . gelatin or plastic, which are either pierced or opened in situ and the powder delivered by air drawn through the <u>device</u> upon <u>inhalation</u> or by means of a manually-operated pump. The powder

employed in the insufflator consists either solely of the active ingredient. . . . comprises from 0.1 to 100% w/w of the formulation. A second type of illustrative aerosol generator comprises a metered dose $\underline{inhaler}$. Metered dose $\underline{inhalers}$ are pressurized aerosol dispensers, typically containing a suspension or solution formulation of the active ingredient in a liquified propellant. During use these $\underline{devices}$ discharge the formulation through a valve adapted to $\underline{deliver}$ a metered volume, typically from 10 to 150 μ l, to produce.

CLM What is claimed is:

- 2. A method according to claim 1, wherein the osmotically active compound is an ionic *osmolyte*.
- 3. A method according to claim 2, wherein the ionic <u>osmolyte</u> is a salt.
- 4. A method according to claim 1, wherein the osmotically active compound is a non-ionic *osmolyte*.
- 5. A method according to claim 4, wherein the non-ionic <u>osmolyte</u> is a sugar.
- 6. A method according to claim 4, wherein the non-ionic <u>osmolyte</u> is a sugar alcohol.
- 7. A method according to claim 4, wherein the non-ionic <u>osmolyte</u> is an organic <u>osmolyte</u>.
- 9. A method according to claim 4, wherein the non-ionic <u>osmolyte</u> is selected from the group consisting of glycerol, dihydroxyacetone erythrose, threose, and erythrulose, ribose, arabinose, xylose, lyxose, psicose, fructose, sorbose,...
- 10. A method according to claim 7, wherein the organic <u>osmolyte</u> is a polyol compound.
- 11. A method according to claim 7, wherein the organic <u>osmolyte</u> is a methylamine compound.
- 12. A method according to claim 7, wherein the organic <u>osmolyte</u> is an amino acid.
- 13. A method according to claim 7, wherein said organic <u>osmolyte</u> is selected from the group consisting of betaine, taurine, inositol, myoinositol, glycerophosphorylcholine, and tihulose.

L51 ANSWER 3 OF 5 USPATFULL on STN

ACCESSION NUMBER:

2002:185291 USPATFULL

TITLE:

INVENTOR (S):

Methods of suppressing hepatitis virus infection using

immunomodulatory polynucleotide sequences

Van Nest, Gary, Martinez, CA, UNITED STATES

Eiden, Joseph J., JR., Danville, CA, UNITED STATES

	NUMBER	KIND	DATE		
PATENT INFORMATION:	US 2002098199	A1	20020725		<
APPLICATION INFO.:	US 2001-802370	A1	20010309	(9)	

NUMBER DATE

PRIORITY INFORMATION: US 2000-188301P 20000310 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Karen R. Zachow, Ph.D., Morrison & Foerster LLP, 755

Page Mill Road, Palo Alto, CA, 94304-1018

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 1602

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

PI US 2002098199 Al 20020725 <--

DETD [0110] ISS polynucleotide formulations may contain additional components such as salts, buffers, bulking agents, <u>osmolytes</u>, antioxidants, detergents, surfactants and other pharmaceutically-acceptable excipients as are known in the art. Generally, liquid ISS

polynucleotide formulations made in.

DETD [0116] Nasopharyngeal and pulmonary routes of administration include, but are not limited to, intranasal, inhalation, transbronchial and transalveolar routes. The ISS-containing polynucleotide may thus be administered by inhalation of aerosols, atomized liquids or powders. Devices suitable for administration by inhalation of ISS-containing compositions include, but are not limited to, nebulizers, atomizers, vaporizers, and metered-dose inhalers. Nebulizers, atomizers, vaporizers and metered-dose inhalers filled with or employing reservoirs containing formulations comprising the ISS-containing polynucleotide(s) are among a variety of devices suitable for use in inhalation delivery of the ISS-containing polynucleotide(s). Other methods of delivering to respiratory mucosa include delivery of liquid formulations, such as by.

DETD . . . administration may be by bolus or infusion administration. For SC administration, administration may be by bolus, infusion or by implantable <u>device</u>, such as an implantable minipump (e.g., osmotic or mechanical minipump) or slow release implant. The ISS polynucleotide(s) may also be delivered in a slow release formulation adapted for IV, IP, IM, ID or SC administration. Administration by <u>inhalation</u> is preferably accomplished in discrete doses (e.g., via a metered dose <u>inhaler</u>), although delivery similar to an infusion may be accomplished through use of a nebulizer. Administration via the transdermal and transmucosal. .

DETD . . . supplied with a liquid formulation of the ISS-containing polynucleotide. Also contemplated are packages for use in combination with a specific <u>device</u>, such as an <u>inhaler</u>, nasal administration <u>device</u> (e.g., an atomizer) or an infusion <u>device</u> such as a minipump.

L51 ANSWER 4 OF 5 USPATFULL on STN

ACCESSION NUMBER: 2002:48592 USPATFULL

TITLE: Methods of preventing and treating viral infections

using immunomodulatory polynucleotide sequences

<--

INVENTOR(S): Nest, Gary Van, Martinez, CA, UNITED STATES

APPLICATION INFO.: US 2001-802685 A1 20010309 (9)

NUMBER DATE

PRIORITY INFORMATION: US 2000-188302P 20000310 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

Karen R. Zachow, Morrison & Foerster LLP, 755 Page Mill

Road, Palo Alto, CA, 94304-1018

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

10 Drawing Page(s)

LINE COUNT:

2175

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

US 2002028784 A1 20020307

[0133] ISS polynucleotide formulations may contain additional components DETD such as salts, buffers, bulking agents, osmolytes,

antioxidants, detergents, surfactants and other pharmaceuticallyacceptable excipients as are known in the art. Generally, liquid ISS polynucleotide formulations made in.

[0141] Nasopharyngeal and pulmonary routes of administration include, DETD but are not limited to, intranasal, inhalation, transbronchial and transalveolar routes. The ISS-containing polynucleotide may thus be administered by inhalation of aerosols, atomized liquids or powders. Devices suitable for administration by inhalation of ISS-containing compositions include, but are not limited to, nebulizers, atomizers, vaporizers, and metered-dose inhalers. Nebulizers, atomizers, vaporizers and metered-dose inhalers filled with or employing reservoirs containing formulations comprising the ISS-containing polynucleotide(s) are among a

variety of devices suitable for use in inhalation delivery of the ISS-containing polynucleotide(s). Other methods of delivering to respiratory mucosa include delivery of liquid formulations, such as by.

. . administration may be by bolus or infusion administration. For DETD SC administration, administration may be by bolus, infusion, or by implantable device, such as an implantable minipump (e.g., osmotic or mechanical minipump) or slow release implant. The ISS polynucleotide(s) may also be delivered in a slow release formulation adapted for IV, IP, IM, ID or SC administration. Administration by inhalation is preferably accomplished in discrete doses (e.g., via a metered dose inhaler), although delivery similar to an infusion may be accomplished through use of a nebulizer. Administration via the transdermal and transmucosal. .

. . . in an ointment for topical formulation in appropriate DETD packaging. Also contemplated are packages for use in combination with a specific device, such as an inhaler, nasal administration device (e.g., an atomizer) or an infusion device such as a minipump.

L51 ANSWER 5 OF 5 USPATFULL on STN

ACCESSION NUMBER:

2001:218477 USPATFULL

TITLE:

Methods of preventing and treating respiratory viral

<--

infection using immunomodulatory polynucleotide

INVENTOR(S):

Van Nest, Gary, Martinez, CA, United States

NUMBER KIND DATE ______

PATENT INFORMATION:

US 2001046967 A1 20011129 US 2001-802686 A1 20010309

A1 20010309 (9) APPLICATION INFO.:

> NUMBER DATE _______

PRIORITY INFORMATION:

US 2000-188583P 20000310 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

MORRISON & FOERSTER LLP, 755 PAGE MILL RD, PALO ALTO,

CA, 94304-1018

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

1 Drawing Page(s)

LINE COUNT:

1527

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ΡI US 2001046967 A1 20011129

DETD

[0100] ISS polynucleotide formulations may contain additional components

such as salts, buffers, bulking agents, osmolytes, antioxidants, detergents, surfactants and other pharmaceuticallyacceptable excipients as are known in the art. Generally, liquid ISS

polynucleotide formulations made in.

DETD

. . . mucosa (such as nasal passages or lung). Nasopharyngeal and pulmonary routes of administration include, but are not limited to, intranasal, inhalation, transbronchial and transalveolar routes. The ISS-containing polynucleotide may thus be administered by inhalation of aerosols, atomized liquids or powders. Devices suitable for administration by inhalation of ISS-containing compositions include, but are not limited to, nebulizers, atomizers, vaporizers, and metered-dose inhalers. Nebulizers, atomizers, vaporizers and metered-dose inhalers filled with or employing reservoirs containing formulations comprising the ISS-containing polynucleotide(s) are among a variety of devices suitable for use in inhalation delivery of the ISS-containing polynucleotide(s). Other methods of delivering to respiratory mucosa include delivery of liquid formulations, such as by.

DETD

. administration may be by bolus or infusion administration. For SC administration, administration may be by bolus, infusion or by implantable device, such as an implantable minipump (e.g., osmotic or mechanical minipump) or slow release implant. The ISS polynucleotide(s) may also be delivered in a slow release formulation adapted for IV, IP, IM, ID or SC administration. Administration by inhalation is preferably accomplished in discrete doses (e.g., via a metered dose inhaler), although delivery similar to an infusion may be accomplished through use of a nebulizer. Administration via the transdermal and transmucosal.

DETD

. in an ointment for topical formulation in appropriate packaging. Also contemplated are packages for use in combination with a specific device, such as an inhaler, nasal administration device (e.g., an atomizer) or an infusion device such as a minipump or transdermal administration device.

=> que 148 and osmolyie THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> s 148 and osmolyie L49 0 L48 AND OSMOLYIE

=> s 148 and osmolyte L50 42 L48 AND OSMOLYTE

=> d 1-42 ti

TOTAL FOR ALL FILES

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(FILE 'HOME' ENTERED AT 21:23:21 ON 21 SEP 2007)
     FILE 'REGISTRY' ENTERED AT 21:25:27 ON 21 SEP 2007
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L1
              1 S E2
                E ECTOINE/CN
L2
              1 S E3
                E FIROIN/CN
              1 S E3
L3
                E FIROIN-A/CN
L4
              1 S E2
                E DIGLYCEROAL PHOSPHATE/CN
                E DIGLYCEROL PHOSPHATE/CN
                E PHOSPHODIGLYCEROL/CN
                E DIPHOSPHOGLYCERATE/CN
                E CYCLIC DIPHOSPHOGLYCERATE/CN
     FILE 'REGISTRY' ENTERED AT 21:33:30 ON 21 SEP 2007
     FILE 'CAPLUS, USPATFULL, USPATOLD, USPAT2' ENTERED AT 21:33:46 ON 21 SEP
     2007
            262 FILE CAPLUS
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             45 FILE USPATFULL
L6
L7
              0 FILE USPATOLD
              9 FILE USPAT2
L8
     TOTAL FOR ALL FILES
L9
           316 S L1 OR L2 OR L3 OR L4
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L10
          38848 FILE USPATFULL
L11
           2748 FILE USPATOLD
L12
L13
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          81697 S INHAL? (S) DEVICE OR NEBUL? OR INHALER
L14
L15
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L16
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L17
L18
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L19
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L20
          83419 FILE CAPLUS
L21
          82805 FILE USPATFULL
L22
           6176 FILE USPATOLD
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          12303 FILE USPAT2
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L24
         184703 S INHAL? (S) DEVICE OR NEBUL? OR INHALER OR INHAL?
L25
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L26
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L27
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L28
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L29
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L30
L31
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L32
              0 FILE USPATOLD
L33
              0 FILE USPAT2
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L34	. 3 S L1 AND L2 AND L3 AND L4	
L35	O FILE CAPLUS	
L36	O FILE USPATFULL	
L37	0 FILE USPATOLD	
L38	0 FILE USPAT2	
	TOTAL FOR ALL FILES	
L39	0 S D HISL9	
L40	259 FILE CAPLUS	
L41	1026 FILE USPATFULL	
L42	65 FILE USPATOLD	
L43	115 FILE USPAT2	
	TOTAL FOR ALL FILES	
T.44	1465 S D HTS	

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